**Prefixes with SI Units**

 Prefix Symbol Fractions Example

|  |  |  |  |
| --- | --- | --- | --- |
| pico | p | 1 x 10 -12 | picometer (pm) |
| nano | n | 1 x 10 -9 | nanometer (nm) |
| micro | µ | 1 x 10 -6 | micrometer (g) |
| milli | m | 1 x 10 -3 | milligram (mg) |
| centi | c | 1 x 10 -2 | centimeter (cm) |
| deci | d | 1 x 10 -1 | decimeter (dm) |

 Prefix Symbol Fractions Example

|  |  |  |  |
| --- | --- | --- | --- |
| tera | T | 1 x 10 12 | Terameter (Tm) |
| giga | G | 1 x 10 9 | Gigameter (Gm) |
| Mega | M | 1 x 10 6 | Megagram (Mg) |
| killo | k | 1 x 10 3 | killogram (kg) |
| hecto | h | 1 x 10 2 | hectometer (hm) |
| deka | da | 1 x 10 1 | dekagram (dag) |

**\*\*BOTH OF THESE TABLES ARE MEANT TO BE USED TO CONVERT TO OR FROM THE BASE UNIT\*\***



|  |
| --- |
| **Table 1.  SI base units**  |
|

|  |  |
| --- | --- |
|  | **SI base unit**  |
| **Base quantity** | **Name** | **Symbol** |
| length | meter | m |
| mass | kilogram       | kg |
| time | second | s |
| electric current | ampere | A |
| thermodynamic temperature       | kelvin | K |
| amount of substance | mole | mol |
| luminous intensity | candela | cd |

 |  |  |

Useful Conversions

|  |  |  |
| --- | --- | --- |
| 1 in = 2.54 cm | 1 oz > 28.4 g | 1 mole = 6.02 x 1023 “things” |
| 1 mi = 1.61 km | 1 kg > 2.21 lb |
| 1 mi2 = 640 acres | 1 lb = 4.45 N | 1 mi = 5280 ft |
| 1 gal = 3.79 L | 1 cal = 4.184 J |  |
| 1m3 = 264 gal | 1 ev = 1.60 x 10-19 J |  |
| 1 knot = 1.15 mi/h | 1 kWH = 3.60 MJ |  |
| 1 kg = 6.02 x 1026 u | 1 hp = 746 W |  |
|  |  |  |